

**KENTUCKY LAW ENFORCEMENT**

**PHYSICAL TRAINING STANDARDS**

**PHYSICAL FITNESS TESTING INFORMATION**



**Prepared by:**



**Department of Criminal Justice Training**  
**and**



**Kentucky Law Enforcement Council**  
**Peace Officers Professional Standards**



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## Physical Training Standards

### BACKGROUND

In response to legislation enacted by the 1998 Kentucky General Assembly, KRS 15.382, the Kentucky Law Enforcement Council and the Kentucky Department of Criminal Justice Training established physical training standards for pre-selection screening of peace officer applicants as well as entry into and successful completion of Basic Training. The Department conducted a validation study to determine the areas of physical fitness which are necessary for doing the job of a Kentucky peace officer and the level of fitness necessary to perform the essential functions of Basic Training.

In May 1998, the Department contracted with Dr. Thomas A. Collingwood of Fitness Intervention Technology, Dallas, Texas, to develop and validate physical fitness standards for the position of peace officer in Kentucky. A physical fitness test battery was identified which encompassed eight areas that predict successful performance of job related physical tasks. These job tasks were identified in the *1997 Job Task Analysis for Non-Ranking Patrol-Level Law Enforcement Officers* conducted by the Department.

From May to August 1998, trained Department of Criminal Justice Training personnel tested a stratified, random sample of 192 incumbent officers from across the state. These officers were selected by their agency heads and completed the battery of tests and three job related scenarios. Dr. Collingwood analyzed the test data to determine the relationship and predictability of the various physical fitness factors for the performance of the critical task. The analysis yielded data that is the basis for the physical fitness test battery utilized as a part of the pre-selection screening for certification as well as the entry and exit standards for Basic Training.

### WHAT IS PHYSICAL FITNESS ?

Physical fitness is the ability to carry out daily tasks with vigor and alertness without undue fatigue and with ample energy to engage in leisure time pursuits and to meet the above average physical stresses encountered in emergency situations. Those physical fitness areas that have been determined to be necessary for Kentucky Law Enforcement are:

1. **Aerobic power or cardiovascular endurance.**
2. **Anaerobic power.**
3. **Upper body absolute strength.**
4. **Upper body muscular endurance.**
5. **Trunk or abdominal muscular endurance.**

### Physical Training Standards

5. **Trunk or abdominal muscular endurance.**
6. **Lower body strength and power.**

#### **WHY IS PHYSICAL FITNESS IMPORTANT?**

First, physical fitness is important because the six physical fitness areas determine an individual's capability to do strenuous job tasks. Secondly, physical fitness is important to minimize health risks for health problems such as heart disease, stroke and obesity—all of which can affect job performance capabilities.

#### **WHAT ARE THE PHYSICAL FITNESS TESTS?**

Six (6) physical fitness tests will be given in three and one half (3 1/2) hours:

- 1 **Vertical Jump Test.**
- 2 **One Repetition Maximum (RM) Bench Press.**
- 3 **One Minute Sit Up Test.**
- 4 **300 Meter Run.**
- 5 **Maximum Push Up Test.**
- 6 **1.5 Mile Run.**

**Physical Training Standards**

**WHAT TEST STANDARDS MUST BE MET?**

Each test is scored separately and standards must be met on each test:

<b>TEST</b>	<b>PRE-SELECTION</b>	<b>ENTRY LEVEL(BT)</b>	<b>EXIT LEVEL (BT)</b>
Vertical Jump	16 inches	16 inches	17 inches
1 RM Bench Press	64% of body wgt	64% of body wgt	73% body wgt
1 Minute Sit Up	18	18	18
300 Meter Run	65 seconds	65 seconds	65 seconds
Maximum Push Up	20	20	25
1.5 Mile Run	17:12	17:12	16:15

The procedure and order for testing will be as follows:

1. Warm up for 3 minutes,	
2. Test Vertical Jump,	rest 2 minutes.
3. Test One Repetition Maximum Bench Press,	rest for 5 minutes.
4. Test One Minute Sit Up,	rest for 15 minutes.
5. Test 300 Meter Run,	rest for 15 minutes.
6. Test Maximum Push Up,	rest for 30 minutes.
7. Warm up, 2 minutes,	
8. Test in the 1.5 Mile Run	
9. Cool down for 5 minutes	

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### HOW DO I PREPARE FOR THE TESTS?

#### **1.5 Mile Run:**

To prepare for this test, one needs to gradually increase running endurance. The schedule below is a proven progressive routine. If one can advance the schedule on a weekly basis, then proceed to the next level. If one can do the distance in less time, then do so.

WEEK	ACTIVITY	DISTANCE	TIME	FREQUENCY
1	Walk	1 mile	17-20 min.	5/week
2	Walk	1.5 mile	25-29 min.	5/week
3	Walk	2 miles	32-35 min.	5/week
4	Walk	2 miles	28-30 min.	5/week
5	Walk/jog	2 miles	27 min.	5/week
6	Walk/jog	2 miles	26 min.	5/week
7	Walk/jog	2 miles	25 min.	5/week
8	Walk/jog	2 miles	24 min.	5/week
9	Jog	2 miles	23 min.	4/week
10	Jog	2 miles	22 min.	4/week
11	Jog	2 miles	21 min.	4/week
12	Jog	2 miles	20 min.	4/week

#### **300 Meter Run:**

To prepare for this test one will need to do interval training. The schedule below is a proven progressive routine. If one can advance the schedule on a weekly basis, then proceed to the next level. If one can do the distance in less time, then it should be done. One should jog the distance twice before each training session before attempting the training pace

WEEK	TRAINING DISTANCE	# of times you sprint REPETITIONS	Time for the sprint TRAINING TIME	Rest period between sprints	FREQUENCY
1	300 meters	2	77 seconds	2 min.	1/week
2	300 meters	2	75 seconds	2 min.	1/week
3	300 meters	2	73 seconds	2 min.	1/week
4	300 meters	2	71 seconds	2 min.	1/week
5	300 meters	2	69 seconds	2 min.	1/week
6	300 meters	2	67 seconds	2 min.	1/week
7	300 meters	2	65 seconds	2 min.	1/week
8	300 meters	2	64 seconds	2 min.	1/week
9	300 meter	2	63 seconds	2 min.	1/week
10	300 meter	2	62 seconds	2 min.	1/week
11	300 meter	2	61 seconds	2 min.	1/week
12	300 meter	2	60 seconds	2 min.	1/week

### TESTING PROCEDURES

- ◆ Subject will run / walk 1.5 miles as rapidly as possible. Score is the time taken to complete the course.
- ◆ Subject will run 300 meters as rapidly as possible. Score is the time taken to complete the course.

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#### **1RM Bench Press:**

Determine your correct body weight. Start out by lifting half your body weight. Each week add 5 pounds. If you can increase weight do so. You should have to push yourself to lift the weight on the last couple of REPS of the last SET.

REPS = The number of times you do the exercise (number of lifts of the weight)

SETS = The number of times you do the series of reps.

WEEK	WEIGHT	SETS	REPS	FREQUENCY
1	50% of Body weight	1	8-10	3/week
2	50% of body weight + 5 lbs	2	8-10	3/week
3-10	50% of body weight + 5 lbs extra each week	3	8-10	3/week



Start position



Maximal lift position

### **TESTING PROCEDURES**

The person is to lift the weight that has been lowered to the chest by the spotters. The first three or four repetitions serve as warm-up lifts. This is to help prevent muscle injury and help prepare for the maximal lift. The maximal lift should occur on the fifth or sixth lift.

#### Protocol Points:

- ◆ Feet flat on floor
- ◆ Hips and back maintain contact with bench
- ◆ Full arm extension
- ◆ Lift starts in the down position.

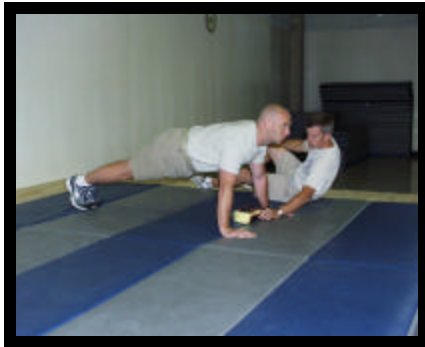
The score is the maximum number of pounds lifted in one repetition.

## Physical Training Standards

### **Maximum Push Up:**

To prepare for this test you will need to follow this routine. The first step is to see how many push ups you can do. For successive weeks keep adding 2 more repetitions per week. If you cannot do a regular push up at first, do the modified push up for several weeks following the same routine, then advance to the regular push up.

WEEK	SETS	REPETITIONS	FREQUENCY
1	1	Total Number	3/week
2	2	Total Number + 2	3/week
3-10	3	Total Number + 2 extra per week	3/week



Start position/Correct up position



Correct down position

## **TESTING PROCEDURES**

The person is to complete as many correct push ups as possible.

Protocol Points:

- ◆ Legs, hips, torso must stay in the same plane
- ◆ Hands shoulder width apart
- ◆ Feet no more than six inches (6") apart
- ◆ Lower chest to touch three inch (3") sponge
- ◆ Return to full arm extension
- ◆ Rest only in the up position.

The score is number of correct push ups completed.

## Physical Training Standards

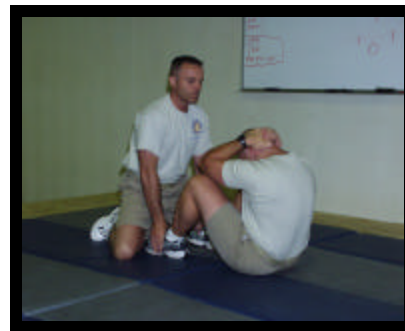
### **One Minute Sit-up:**

To prepare for this test you will need to follow this routine. The first step is to see how many sit ups you can do in a minute. For successive weeks keep adding 2 more repetitions per week.

WEEK	SETS	REPETITIONS	FREQUENCY
1	1	Total Number	3/week
2	2	Total Number + 2	3/week
3-10	3	Total Number + 2 for each	3/week



Start position/correct down position



Correct up position

## **TESTING PROCEDURES**

The person is to complete as many correct sit-ups as possible in one (1) minute. Score is number of correct sit-ups completed in one (1) minute.

Protocol points:

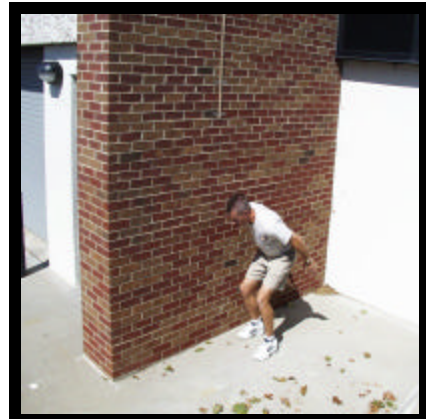
- ◆ Knees bent 90°
- ◆ Feet flat on floor; feet being held
- ◆ Back flat on floor (start position)
- ◆ Hands overlapped behind head
- ◆ Elbows to top of knee (up position)
- ◆ Top of shoulder blade touch floor (down position)
- ◆ Rest in up position

## Physical Training Standards

### VERTICAL JUMP TEST



To mark standard reach



Start position



Maximum jump

### TESTING PROCEDURES

#### Protocol Points:

- ◆ Subject stands with one side toward the wall and reaches up as high as possible to mark his/her standard reach.
- ◆ Subject jumps as high as possible and marks the spot on the wall above his/her standard reach mark. Foot closest to the wall must remain stationary until the jump is initiated.
- ◆ Score is the inches to the nearest 1/2 inch.
- ◆ The best of three (3) trials is the score.

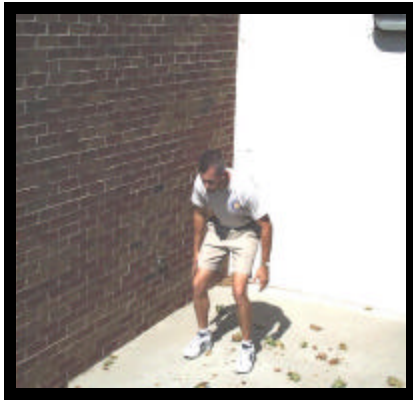
### Physical Training Standards

#### **Vertical Jump**

To prepare for this test you will need to do plyometric training. The basic plyometric exercise routine consists of three exercises: double leg vertical jump, single leg vertical jump and the double leg hop. Perform each exercise with 1 set of 10 repetitions, 3 days a week. Do the repetitions without stopping. Rest 3 minutes between each set of each exercise.

EXERCISE	SETS	REPS	REST	FREQUENCY
Double leg vertical jump	1	10	3 min.	3/week
Double leg hop	1	10	3 min.	3/week

#### **DOUBLE LEG VERTICAL JUMP**



Counter movement



Vertical jump

*Intensity level:* High.

*Starting position:* Stand with the feet shoulder-width apart.

*Direction of jump:* Vertical.

*Arm action:* Double arm action.

*Starting action:* Perform a rapid counter movement and jump as high as possible.

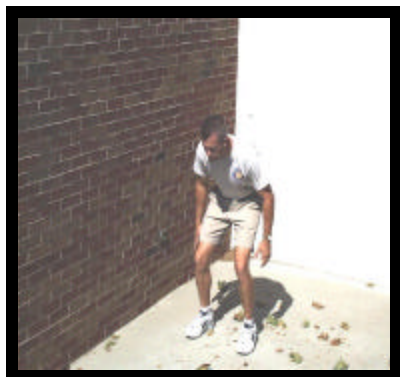
*Ascent:* Thrust arms upward vigorously and reach as high as possible with one or two hands.

*Descent:* When the feet hit the ground, jump again immediately without a stutter step.

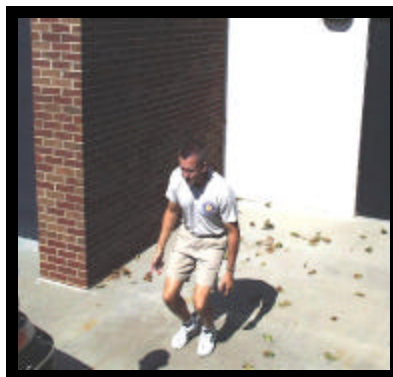
*Volume* 10 repetitions.

## Physical Training Standards

### DOUBLE LEG HOP



Starting position



Jump for distance

*Intensity level:* Medium.

*Starting position:* Stand with feet shoulder-width apart.

*Direction of jump:* Horizontal, with a vertical component as well.

*Arm action:* Double arm action.

*Starting action:* Jump off of both legs and strive for maximal distance.

*Ascent:* Think about “hanging in the air.”

*Descent:* Land in the starting position and immediately repeat the movement.

*Volume:* 10 repetitions for short response, or 30 m or more for long response.

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